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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/580,233	05/26/2000	Richard I. Adduci JR.	10022/15	8233

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EXAMINER

BORLINGHAUS, JASON M

ART UNIT PAPER NUMBER

3628

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/580,233	ADDUCI ET AL.	
	Examiner	Art Unit	
	Jason M. Borlinghaus	3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 May 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

[Handwritten signature]

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/9/05 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 – 7, 9 – 10, 17 – 23 and 25 – 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotler (Kotler, Philip & Armstrong, Gary. *Principles of*

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Marketing 8th Edition. Prentice Hall. Upper Saddle River, New Jersey. 1999) in view of Weerahandi (Weerahandi, Samaradasa & Moitra, Soumyo. Using Survey Data to Predict Adoption and Switching for Services. Journal of Marketing Research. vol. 32, iss. 1. February 1995. p.85 - 96).

Regarding Claim 1, Kotler discloses a method for providing a financial analysis for a new product or service, the method comprising the steps of:

- accepting user-specific input relating to a new product or service (concept testing). (“Concept testing calls for testing new-product concepts with groups of target consumers...After being exposed to the concept, consumers then may be asked to react to it by answering questions...” – see page 279. “Many firms routinely test new-product concepts with customers before attempting to turn them into actual new products...The poll rates participants’ interest in buying a given new product, their perceptions of how new and different the product idea is...” – see page 280.);
- accepting user-specific input relating to an existing product or service (survey research). (“Survey Research. The gathering of primary data by asking people questions about their knowledge, attitudes, preferences, and buying behavior.” – see page 111.);
- utilizing market data for existing product or service (sales history of similar products). (“To estimate sales, the company might look at the sales history

at the sales history of similar products and conduct surveys of market opinion.” – see page 281);

- accessing information including general market data applicable to the new product or service (industry sales information). (“Besides estimating total and area demand, a company will want to know the actual industry sales in its market... Industry trade associations often collect and publish total industry sales, although not individual sales in the market.” – see A4); and
- a standard adoption curve for adoption of the new product or service. (“We define the adoption process as ‘the mental process through which an individual passes from first learning about an innovation to final adoption’, and adoption as the decision by an individual to become a regular user of the product.” – see page 156 – 157 and see figure 5-7, page 157).
- wherein the information further includes a first set of cost data values associated with a new product or service deployment cost (costs) and a second set of cost data values associated with an operations and maintenance cost for the new product or service (costs). (“Once management has decided its product concept and marketing strategy, it can evaluate the business attractiveness of the proposal. Business analysis involves a review of sales, costs, and profit projections for a new product to find out whether they satisfy the company’s objectives.” – see page 281);

- wherein the information further includes a revenue data value (sales history of similar products) associated with the existing product or service. (“To estimate sales, the company might look at the sales history at the sales history of similar products and conduct surveys of market opinion.” – see page 281.);
- estimating at least one potential revenue value (sales figures) associated with the at least one new product or service. (“After preparing the sales forecast, management can estimate the expected costs and profits for the product, including marketing, R&D, manufacturing, accounting, and finance costs. The company then uses the sales and costs figures to analyze the new product’s financial attractiveness.” – see page 281);
- wherein estimating comprises generating at least one revenue estimate (estimated sales) based on the accepted user-specific input (surveys of market opinion), the revenue data value (sales history of similar products) and general market data (industry sales information). (“To estimate sales, the company might look at the sales history at the sales history of similar products and conduct surveys of market opinion.” – see page 281. *supra* – see A4. “The company can lose a lot of profit by overestimating or underestimating the market.” – see page A1. “Forecasting is the art of estimating future demand by anticipating what buyers are likely to do under a given set of future conditions.” – see page A5.); and

- wherein estimating further comprises generating at least one cost estimate based on the first set of cost data values (costs) and the second set of cost data values (costs). (supra - see page 281).

Kotler does not teach a method for providing a financial analysis for an enhanced wireless communication service, the method comprising the steps of:

- accepting user-specific input into a computer relating to an existing wireless communication service and the enhanced wireless communication service, wherein the user-specific input includes a wireless application selection for selecting at least one wireless application supported by the enhanced wireless communication service and a market data input interface for entering existing data about the existing wireless communication service;
- accessing a reference database including general market data applicable to the enhanced wireless communication service and a standard adoption curve for adoption of the enhanced wireless communication service, wherein the reference database further includes a first set of cost data values associated with a wireless infrastructure deployment cost and a second set of cost data values associated with an operations and maintenance cost for the enhanced wireless communication service, wherein the reference database further includes a revenue data value associated with the existing wireless communication service;

- adjusting the standard adoption curve to obtain an adjusted adoption curve based on the accepted user-specific input;
- estimating at least one potential revenue value associated with the at least one wireless application, wherein estimating comprises generating at least one revenue estimate based on the accepted user-specific input, the revenue data value, the general market data and the adjusted adoption curve to generate at least one revenue estimate, and
- wherein estimating further comprises generating at least one cost estimate based on the first set of cost data values, the second set/of cost data values and the adjusted adoption curve; and
- presenting a graphical depiction of a financial analysis based on an evaluation of the at least one potential revenue value, the adjusted adoption curve, the general market data, the first set of cost data values, the second set of cost data values and the revenue data value.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kotler to allow for any inclusion, exclusion, selection or organization of user-specific input that the inventor desired.

Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kotler by incorporating the ability to adjust the adoption curve to provide the most accurate rate of adoption for financial analysis. As evidenced by Kotler which states "The characteristics of the new product affect its rate of adoption...Five characteristics are especially important in influencing an

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innovation's rate of adoption." (see page 158), establishing that the rate of adoption (represented by the adoption curve) may need to be adjusted based upon the influence of certain characteristics.

Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kotler by incorporating the ability to adjust the adoption curve based upon user-specific input, collected as disclosed by Kotler, to provide the most relevant and accurate information by which to generate the rate of adoption for financial analysis.

Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kotler by incorporating the ability to utilize all relevant and available data at its disposal (market data, adoption curve, deployment costs, maintenance costs, existing revenue figures, etc.) having some relation to the new product or service in its financial analysis of that new product or service to provide the most accurate and comprehensive financial analysis possible.

Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the common strategic and analytical methods regarding the possible development of a new product or service, as disclosed by Kotler, in regards to the possible development of a new wireless service. For example, adoption curves and demand forecasting, common strategic tools, were already being employed in regards to telecommunications products and services at the time the invention was made to provide more accurate financial and market analysis for these possible new products and services. As evidenced by Weerahandi which states

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"Information and telecommunication services and products provided by the latest technology pose new challenges to market modelers...Studying the behavior or customer adoption of new services is an important problem in marketing...Here, we focus on predicting adoption and switching as well as on forecasting the demand for competing services or products." (see page 85).

Neither Kotler nor Weerahandi teach that all the methods involved in the financial analysis disclosed above are automatic. However, Kotler does disclose "Increasing information requirements have been met by an explosion of information technologies...Using improved information systems, companies can now generate information in great quantities...A marketing consists of people, equipment, and procedures to gather, sort, analyze, evaluate and distribute needed, timely, and accurate information to marketing decision makers." (see page 98 – 99 and see figure 4-1) establishing that computers and technology are being utilized in conducting analysis, research and formulating business strategies. Regardless, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have automated the method, since it has been held that broadly providing a mechanical or automatic means to replace manual activity that accomplishes the same result involves only routine skill in the art. *In re Venner*, 120 USPQ 192.

Therefore, automation of the common market and financial analysis, as discussed above, would encompass the use of such common information system components, such as an input interface, a database and a graphical display, as disclosed above.

Regarding Claims 2 – 7, Kotler discloses a method wherein:

- the adoption curve must be adjusted or changed based upon certain characteristics of the consumer (other characteristics) and the product or service. (“The characteristics of the new product affect its rate of adoption...Five characteristics are especially important in influencing an innovation’s rate of adoption...Other characteristics influence the rate of adoption, such as initial and ongoing costs, risk and uncertainty, and social approval.” – see page 158 – 159);
- geography affects adoption (purchasing) of the product or service. (“Such population shifts interest marketers because people in different regions buy differently.” – see page 72);
- the specific product or service affects the adoption of the product or service. (“Some products catch on almost overnight (Frisbees), whereas others take a long time to gain acceptance (personal computers).” – see page 158);
- determining a saturation point (market potential). (“Marketing efforts above a certain level would not cause much more demand. This upper limit of market demand is called market potential.” – see page A1); and
- affluence affects adoption (preference) of the product or service. (“Social class is not determined by a single factor, such as income, but is measured as a combination of occupation, income, education, wealth and other variables...Social classes show distinct product and brand

preferences in areas such as clothing, home furnishings, leisure activity, and automobiles.” – see page 139 – 140).

Neither Kotler nor Weerahandi teach a method wherein:

- the adjusting step comprises adjusting the standard adoption curve based on a user input of a selected geographic region from a library of regions and a selected application from a library of applications of the enhanced wireless communications service;
- changing a slope from the standard adoption curve to a revised slope of an adjusted adoption curve based on the user input of a specific geographic region;
- the adjusting step comprises changing a saturation point from the standard adoption curve to a revised saturation point of one of the adjusted adoption curve and the adjusted adoption curve based on the user input of a specific application;
- increasing a slope from the standard adoption curve to a revised slope of an adjusted adoption curve based on the user input of a more affluent region than average for deploying the enhanced wireless communications service;
- decreasing a slope from the standard adoption curve to a revised slope of an adjusted adoption curve based on the user input of a less affluent region than average for deploying the enhanced wireless communications service; and

- the adjusting step comprises lowering a saturation point from the standard adoption curve to a revised saturation point on one of the standard adoption curve and the adjusted adoption curve based on the user input of a particular application.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kotler by incorporating the ability to alter the adoption curve, such as adjusting the adoption curve, the slope of the adoption curve, or the saturation point, to more accurately and correctly reflect the marketplace and its associated demand.

Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kotler to incorporate the ability to alter the adoption curve by utilizing such well known and common market segmentation methods as accounting for geographic regions and affluence of the customer to provide a more accurate and correct measurement of the marketplace and its associated demand.

Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kotler to incorporate the ability to alter the adoption curve by utilizing obtained user-specific input to allow for the alteration of the adoption curve to more accurately and correctly reflect the marketplace and its associated demand.

Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kotler to allow for any organization of the

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user interface for obtaining user-specific input that the inventor desired such as presenting the user with a library of geographic regions and a library of applications.

Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the common strategic and analytical methods regarding the possible development of a new product or service, as disclosed by Kotler, in regards to the possible development of a new wireless service. For example, adoption curves and demand forecasting, common strategic tools, were already being employed in regards to telecommunications products and services at the time the invention was made to provide more accurate financial and market analysis for these possible new products and services. As evidenced by Weerahandi which states "Information and telecommunication services and products provided by the latest technology pose new challenges to market modelers... Studying the behavior or customer adoption of new services is an important problem in marketing... Here, we focus on predicting adoption and switching as well as on forecasting the demand for competing services or products." (see page 85).

Neither Kotler nor Weerahandi teach that all the methods involved in the market analysis disclosed above are automatic. However, Kotler does disclose "Increasing information requirements have been met by an explosion of information technologies... Using improved information systems, companies can now generate information in great quantities... A marketing consists of people, equipment, and procedures to gather, sort, analyze, evaluate and distribute needed, timely, and accurate information to marketing decision makers." (see page 98 – 99 and see figure

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4-1) establishing that computers and technology are being utilized in conducting analysis, research and formulating business strategies. Regardless, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have automated the method, since it has been held that broadly providing a mechanical or automatic means to replace manual activity that accomplishes the same result involves only routine skill in the art. *In re Venner*, 120 USPQ 192.

Regarding Claim 9 - 10, Kotler discloses a method further comprising the step of:

- estimating revenue (sales projection) and costs of the new product or service (cost projections). ("Once management has decided its product concept and marketing strategy, it can evaluate the business attractiveness of the proposal. Business analysis involves a review of sales, costs, and profit projections for a new product to find out whether they satisfy the company's objectives." – see page 281);
- segmenting the market by a geographic region. ("Within the chosen industry, a company can further segment by customer size or geographic location." – see page 212);
- forecasting demand; ("Forecasting is the art of estimating future demand by anticipating what buyers are likely to do under a given set of future conditions." – see page A5.); and
- utilizing an adjusted adoption curve. (see page 157, figure 5-7).

Kotler does not teach a method further comprising the step of:

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- estimating revenue of the enhanced wireless communications service within a geographic region based on the accepted user input and the adjusted adoption curve; and
- estimating cost of the enhanced wireless communications service within a geographic region based on the accepted user input and the adjusted adoption curve.

Weerahandi discloses a method further comprising the step of:

- forecasting demand based upon an adoption curve. (“Information and telecommunication services and products provided by the latest technology pose new challenges to market modelers...Studying the behavior or customer adoption of new services is an important problem in marketing...Here, we focus on predicting adoption and switching as well as on forecasting the demand for competing services or products.” (see page 85).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kotler by utilizing the user-specific input and adoption curve to forecast demand, as disclosed by Weerahandi, in the estimation of revenue and costs of the new product or service as revenue and cost estimations that are closely tied to demand forecasts will provide more accurate and complete results.

Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kotler by segmenting the market by geographic location for such calculations as segmentation would allow take into

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consideration geographic differences in demand in contrast to one unified calculation of demand.

Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the common strategic and analytical methods regarding the possible development of a new product or service, as disclosed by Kotler, in regards to the possible development of a new wireless service. For example, adoption curves and demand forecasting, common strategic tools, were already being employed in regards to telecommunications products and services at the time the invention was made to provide more accurate financial and market analysis for these possible new products and services. As evidenced by Weerahandi which states "Information and telecommunication services and products provided by the latest technology pose new challenges to market modelers... Studying the behavior or customer adoption of new services is an important problem in marketing... Here, we focus on predicting adoption and switching as well as on forecasting the demand for competing services or products." (see page 85).

Neither Kotler nor Weerahandi teach that all the methods involved in the market analysis disclosed above are automatic. However, Kotler does disclose "Increasing information requirements have been met by an explosion of information technologies... Using improved information systems, companies can now generate information in great quantities... A marketing consists of people, equipment, and procedures to gather, sort, analyze, evaluate and distribute needed, timely, and accurate information to marketing decision makers." (see page 98 – 99 and see figure

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4-1) establishing that computers and technology are being utilized in conducting analysis, research and formulating business strategies. Regardless, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have automated the method, since it has been held that broadly providing a mechanical or automatic means to replace manual activity that accomplishes the same result involves only routine skill in the art. *In re Verner*, 120 USPQ 192.

Regarding Claim 17, further system claim would have been obvious from method claim rejected above, Claim 1, and is therefore rejected using the same art and rationale.

Regarding Claims 18 - 23, further system claim would have been obvious from method claims rejected above, Claims 2 - 7, and are therefore rejected using the same art and rationale.

Regarding Claims 25 - 26, further system claim would have been obvious from method claims rejected above, Claims 9 - 10, and are therefore rejected using the same art and rationale.

Claims 8 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotler and Weerahandi, as in Claims 1 and 17 above, and in further view of Kroenke (Kroenke, David M. *Database Processing: Fundamentals, Design & Implementation 6th Edition*. Prentice Hall. Upper Saddle River, New Jersey. 1998).

Regarding Claim 8, neither Kotler nor Weerahandi teach a method further comprising the step of:

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- assigning a first level security for a user with respect to the presenting step and the accepting step and assigning a second level of security higher than the first level of security with respect to the user being capable of modifying the contents of the reference database.

Assigning different levels of security to different users is old and well known in the art of database design. As evidenced by Kroenke which states "A subject is any identifiable user or user group that can process the database...With subject-oriented security, the subject is defined to the DBMS, and each is allocated permissions. Before allowing the subject to perform a database action, the DBMS confirms that he or she or it has such authority." (see pages 295 – 296).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kotler and Weerahandi by incorporating multiple security levels, as was disclosed by Kroenke, to prevent the users, from which information is obtained, from deleting or modifying the information obtained once recorded.

7-18-05
Regarding Claim 24, further system claim would have been obvious from method claim rejected above, Claim 8, and is therefore rejected using the same art and rationale.

7-18-05
Claims 11 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotler and Weerahandi, as in *claims 1 and 17* above, and in further view of Townsend (Townsend, Carl. *Mastering Excel 4 for Windows*. Sybex. Alameda, California. 1992)

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and Raiborn (Raiborn, Cecily A., Barfield, Jesse T. & Kinney, Michael R. *Managerial Accounting*. West Publishing Company. St. Paul, Minnesota. 1993).

Regarding Claim 11, Kotler discloses a method wherein the presenting step comprises:

- providing a graphical depiction consisting of a market segment graph. (see page 209, figure 7-3);
- segmenting the market. ("The first is market segmentation – dividing a market into distinct groups of buyers with different needs, characteristics, or behaviors or marketing mixes." – see page 196); and
- calculating revenue and cost projections. ("Once management has decided its product concept and marketing strategy, it can evaluate the business attractiveness of the proposal. Business analysis involves a review of sales, costs, and profit projections for a new product to find out whether they satisfy the company's objectives." – see page 281).

Neither Kotler nor Weerahandi teach a method wherein the presenting step comprises:

- providing a graphical depiction selected from the group consisting of a revenue by a market segment graph;
- a cash-flow projection graph;
- number of subscribers by application of the enhanced wireless service;
and
- number of subscribers by market segment.

Townsend discloses a method wherein the presenting step comprises:

- providing a graphical depiction (chart) of revenue by market segment (geographic region). (see page 425, figure 20-2); and
- graphical depiction (chart) of additional information in variety of formats (flexible charting). ("With Excel, you can design presentation-quality charts that communicate ideas quickly and effectively. Excel's charting features are extremely flexible." – see page 423).

Raiborn discloses a method comprising:

- calculating revenue by a market segment. ("Segment margin represents the excess revenue over direct variable expenses and avoidable fixed expenses." – see page 733); and
- projecting cash flows (cash inflows and cash outflows). ("The net present value method uses discounted cash flows to determine if the rate of return on a project is equal to, higher than, or lower than the desired rate of return...A project's net present value (NPV) is the difference between the present values of all its cash inflows and cash outflows" – see page 771).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kotler and Weerahandi by incorporating the ability to segment, as disclosed by Kotler, financial data by market, by product/service or by any other method of division that the inventor desired to more closely tie financial data, such as revenue and sales, to the relevant segment affected, such as geographic

region or product/service line. This would provide the user of the financial analysis more detailed and segment-specific organization of the data.

Additionally, graphical depiction of financial data and financial analyses is old and well known in the art of business, as evidenced by Townsend. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kotler by incorporating the ability to provide a graphical depiction of any financial data or financial analysis that the inventor desired, from basic record-keeping such as the number of subscribers to cash flow projections. Such graphical representation would have allowed for more clear communication of information to the reviewer of such financial analyses than mere financial figures would allow.

Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kotler and Weerahandi by incorporating other traditional financial analyses, such as a cash flow projection, as disclosed by Raiborn, into the graphical depiction of financial analyses to allow for a comprehensive listing of financial analyses to be utilized by the user.

Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the common strategic and analytical methods regarding the possible development of a new product or service, as disclosed by Kotler and Raiborn, in regards to the possible development of a new wireless service. For example, adoption curves and demand forecasting, common strategic tools, were already being employed in regards to telecommunications products and services at the time the invention was made to provide more accurate financial and

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market analysis for these possible new products and services. As evidenced by Weerahandi which states "Information and telecommunication services and products provided by the latest technology pose new challenges to market modelers... Studying the behavior or customer adoption of new services is an important problem in marketing... Here, we focus on predicting adoption and switching as well as on forecasting the demand for competing services or products." (see page 85).

Regarding Claim 27, further system claim would have been obvious from method claim rejected above, Claim 11, and is therefore rejected using the same art and rationale.

Claims 12 - 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotler and Weerahandi, as in Claim 1 above, and in further view of Heizer (Heizer, Jay & Render, Barry. *Operations Management 5th Edition*. Prentice Hall. Upper Saddle River, New Jersey. 1999.)

Regarding Claims 12 – 13, neither Kotler nor Weerahandi teach a method wherein:

- the financial analysis comprises a sensitivity analysis showing the sensitivity of net present value of a business based on the enhanced wireless communications service to a change in at least one variable factor; and
- the at least one variable factor is selected from the group consisting of operating costs of the enhanced wireless service, investment costs of the

enhanced wireless service, market uptake of the enhanced wireless service, usage rate of the enhanced wireless service, and price level for service offerings of the enhanced wireless service.

Heizer discloses a method wherein:

- the financial analysis comprises an analysis of net present value of a business based upon a number of variable factors. ("The number of initial alternatives may be very large, but analysis of six major factors – cost, volume, human resource constraints, technology, quality and reliability – typically reduces the number of alternatives to a few. Analysis should show the capital investment, variable cost, and cash flows as well as net present value for each alternative." – see page 257);
- the financial analysis comprises a sensitivity analysis showing the sensitivity of financial analysis of a business based upon a change in at least one variable factor (parameter). ("In addition to knowing the value of each decision variable (the X_i 's) and the value of the objective function, they want to know how sensitive these answers are to input parameter changes...Sensitivity analysis, or postoptimality analysis, is the study of how sensitive solutions are to parameter changes." – see page 713);
- variable factors considered in financial analysis include:
 - operating costs of the product or service. (costs – supra, see page 257);

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- investment costs of the product or service. (capital investment – supra, see page 257);
- market uptake (demand) of the product or service. ("Demand forecasts are projections of demand for a company's products or services. These forecasts, also called sales forecasts, drive a company's production, capacity and scheduling systems and serve as inputs to financial, marketing and personnel planning" – see page 143);
- usage rate of the product or service. (volume – supra, see page 257); and
- price level for the product or service. (supra, page 257 – It is inherent that a price level would need to be determined in order to run cash flow and net present value calculations.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kotler and Weerahandi by incorporating a sensitivity analysis of the net present value of the new product or service, as disclosed by Heizer, to allow the user to conduct a common and well known financial analysis on the proposed new product or service before implementation.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kotler, Weerahandi and Heizer to allow for any inclusion, exclusion or consideration of variables that the inventor desired. Sensitivity analysis is a financial analysis based upon at least one variable factor. The inventor could have selected any collection of variable factors for consideration that inventor

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desired, including those common and well known variables, disclosed by Heizer, listed above.

Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the common strategic and analytical methods regarding the possible development of a new product or service, as disclosed by Kotler and Heizer, in regards to the possible development of a new wireless service. For example, adoption curves and demand forecasting, common strategic tools, were already being employed in regards to telecommunications products and services at the time the invention was made to provide more accurate financial and market analysis for these possible new products and services. As evidenced by Weerahandi which states "Information and telecommunication services and products provided by the latest technology pose new challenges to market modelers...Studying the behavior or customer adoption of new services is an important problem in marketing...Here, we focus on predicting adoption and switching as well as on forecasting the demand for competing services or products." (see page 85).

Neither Kotler, Weerahandi nor Heizer teach that all the methods involved in the market analysis disclosed above are automatic. However, Kotler does disclose "Increasing information requirements have been met by an explosion of information technologies...Using improved information systems, companies can now generate information in great quantities...A marketing consists of people, equipment, and procedures to gather, sort, analyze, evaluate and distribute needed, timely, and accurate information to marketing decision makers." (see page 98 – 99 and see figure

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4-1) establishing that computers and technology are being utilized in conducting analysis, research and formulating business strategies. Regardless, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have automated the method, since it has been held that broadly providing a mechanical or automatic means to replace manual activity that accomplishes the same result involves only routine skill in the art. *In re Venner*, 120 USPQ 192.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kotler, Weerahandi, as in Claim 1 above, and in further view of Townsend.

Regarding Claim 14, neither Kotler, Weerahandi nor Heizer teach a method wherein the financial analysis comprises:

- a bar chart of different variable factors potentially impacting net present value of a business based on the enhanced wireless communications service, the variable factors presented as horizontally extending bars along a vertical axis, a respective percentage change in the net present value for a corresponding incremental constant change in a variable factor indicated by the horizontal length of the bar from the vertical axis.

Townsend discloses a method wherein the financial analysis comprises:

- a bar chart, the variable factors presented as horizontally extending bars along a vertical axis. (see page 425 – figure 20.2); and
- graphical depiction (chart) of additional information in variety of formats (flexible charting). (“With Excel, you can design presentation-quality

charts that communicate ideas quickly and effectively. Excel's charting features are extremely flexible." – see page 423).

Charting of financial data and financial analyses is old and well known in the art of business, as evidenced by Townsend. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kotler, Weerhandi and Heizer by incorporating the ability to provide a graphical depiction of any financial data or financial analysis that the inventor desired, such as charting the sensitivity analysis, as disclosed by Heizer, as a chart, as disclosed by Townsend. Such graphical representation would have allowed for more clear communication of information to the reviewer of such financial analyses than mere financial figures would allow.

Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have allowed for any display, organization or format of the financial information for charting that the inventor desired, such as indicating the incremental constant change in a variable factor by the horizontal length of the bar from the vertical axis.

Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the common strategic and analytical methods regarding the possible development of a new product or service, as disclosed by Kotler and Heizer, in regards to the possible development of a new wireless service. For example, adoption curves and demand forecasting, common strategic tools, were already being employed in regards to telecommunications products and services at the time the invention was made to provide more accurate financial and market analysis for

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these possible new products and services. As evidenced by Weerahandi which states "Information and telecommunication services and products provided by the latest technology pose new challenges to market modelers... Studying the behavior or customer adoption of new services is an important problem in marketing... Here, we focus on predicting adoption and switching as well as on forecasting the demand for competing services or products." (see page 85).

Claims 15 – 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotler and Weerahandi, as in Claim 1 above, and in further view of Raiborn and Townsend.

Kotler discloses a method wherein:

- creating different market segments. ("There is no single way to segment a market. A marketer has to try different segmentation variables, alone and in combination, to find the best way to view the market structure." – see page 202); and
- the market segments include an adult market segment (age and life cycle segmentation – see page 204), a youth market segment (age and life cycle segmentation – see page 204), a large business market segment (business market segmentation by company size – see page 213, Table 7-3), a medium business market segment (business market segmentation by company size – see page 213, Table 7-3), and small business market

segment (business market segmentation by company size – see page 213, Table 7-3).

Kotler does not teach a method wherein:

- the financial analysis comprises a graph of average revenue per user per a measured time interval, the graph including a group of plotted lines representing said average revenue per user within different market segments versus time; and
- the market segments include an adult market segment, a youth market segment, a large business market segment, a medium business market segment, and small business market segment.

Raiborn discloses a method wherein:

- financial analysis comprises average revenue per unit (see page 362, exhibit 9-1).

Townsend discloses a method wherein the financial analysis comprises:

- the financial analysis comprises a graph of revenue per product. (see page 424, figure 20.1);
- the graph including a group of plotted lines representing said revenue per product versus time. (“Area charts are useful for showing the relative importance of different data over time. The sum of the plotted values is emphasized, with different data series as distinct rows. This figure shows an area graph that compares the sales of two products over time.” – see page 424);

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- the graph of revenue within different market segments (geographic segments). (see page 425, figure 20.2); and
- graphical depiction (chart) of additional information in variety of formats (flexible charting). ("With Excel, you can design presentation-quality charts that communicate ideas quickly and effectively. Excel's charting features are extremely flexible." – see page 423).

Calculating average revenue per user per a measured time period has been old and well known in the art of accounting and financial analysis. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kotler, Weerhandi, Raiborn and Townsend by incorporating the ability to calculate average revenue, average cost, average profit, average sales or any other common financial benchmark based upon the number of users, the number of units, the number of distribution centers or any other variable that the inventor desired.

Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kotler, Weerhandi, Raiborn and Townsend by incorporating the ability to segment, as disclosed by Kotler, financial data by market, by product/service or by any other method of division that the inventor desired to more closely tie financial data, such as revenue and sales, to the relevant segment affected, such as geographic region or product/service line. This would provide the user of the financial analysis more detailed and segment-specific organization of the data.

Additionally, charting of financial data and financial analyses is old and well known in the art of business, as evidenced by Townsend. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kotler, Weerhandi, Raiborn by incorporating the ability to provide a graphical depiction of any financial data or financial analysis that the inventor desired, such as charting the average revenue as a chart, as disclosed by Townsend. Such graphical representation would have allowed for more clear communication of information to the reviewer of such financial analyses than mere financial figures would allow.

Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the common strategic and analytical methods regarding the possible development of a new product or service, as disclosed by Kotler, in regards to the possible development of a new wireless service. For example, adoption curves and demand forecasting, common strategic tools, were already being employed in regards to telecommunications products and services at the time the invention was made to provide more accurate financial and market analysis for these possible new products and services. As evidenced by Weerahandi which states "Information and telecommunication services and products provided by the latest technology pose new challenges to market modelers... Studying the behavior or customer adoption of new services is an important problem in marketing... Here, we focus on predicting adoption and switching as well as on forecasting the demand for competing services or products." (see page 85).

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Response to Arguments

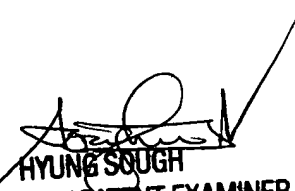
Applicant's arguments with respect to Claims 1 - 27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Borlinghaus whose telephone number is (571) 272-6924. The examiner can normally be reached on 8:30am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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